

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2017 Proceedings

Pacific Asia Conference on Information Systems
(PACIS)

Summer 7-20-2017

The power of LinkedIn: Will professionals leave their organizations for professional advancement because of their use of LinkedIn?

Vincent Cho

The Hong Kong Polytechnic University, vincent.cho@polyu.edu.hk

Wing Lam

The Hong Kong Polytechnic University, wing.lam@polyu.edu.hk

Follow this and additional works at: <http://aisel.aisnet.org/pacis2017>

Recommended Citation

Cho, Vincent and Lam, Wing, "The power of LinkedIn: Will professionals leave their organizations for professional advancement because of their use of LinkedIn?" (2017). *PACIS 2017 Proceedings*. 290.
<http://aisel.aisnet.org/pacis2017/290>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2017 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

The power of LinkedIn: Will professionals leave their organizations for professional advancement because of their use of LinkedIn?

Completed Research Paper

Vincent Cho

The Hong Kong Polytechnic University
Hong Kong
vincent.cho@polyu.edu.hk

Wing Lam

The Hong Kong Polytechnic University
Hong Kong
wing.lam@polyu.edu.hk

Abstract

With the growth of Web 2.0/3.0, social network sites have been created for various purposes for a wide spectrum of users. Creating a digital footprint has become imperative, especially for professionals seeking career development and professional advancement. This study explores professionals' intention to leave an organization for professional advancement (ILPA) based on their use of a professional social network site, LinkedIn. Our framework leverages self-determination theory (SDT) to demonstrate why professionals use this online social networking service. To validate our theoretical framework, 379 randomly selected active LinkedIn users completed an online questionnaire. The extent to which using LinkedIn influences ILPA is examined and the results support all our hypotheses. Our post-hoc analysis indicates a strong relationship between needing support and motivation for participating in LinkedIn. We attempt to explain the findings by using the time perspective concept. This study is also of practical value to companies seeking to set policies to retain professionals. Implications for theory and practice are discussed.

Keywords: self-determination theory, LinkedIn

Introduction

Professionalism has long been of interest to organizational scholars because of its potential for generating organizational productivity. However, professionals may intend to leave their organizations if they feel their services are not properly valued (Rong & Grover, 2009). Only a few studies have addressed where people go when they quit (Mourmant et al. (2009)). We explore a common phenomenon for professionals: the intention to leave an organization for professional advancement (ILPA), which is defined as the intention of a professional to leave an organization for another organization for the sake of his/her advancement in the profession (Cho & Huang, 2012).

Hitt et al. (2007) stated that approximately 70% of employee turnover can be explained by contextual factors such as market opportunities and social networks. A 2015 CareerBuilder-Harris poll of 2,000 U.S. HR managers from various industries indicated that more than one third of employers said they would not consider interviewing a candidate if no online information could be found. A digital footprint has become more crucial for job seekers.

LinkedIn, regarded as the Facebook for professionals, is a platform for searching jobs, building professional networks, and sharing the latest industry standards and information. According to searchenginejournal.com in February 2012, 76% of companies used LinkedIn for recruitment. Hence, it is interesting to understand the influence of using LinkedIn on professionals' intention to leave an organization for professional advancement (ILPA).

Our theoretical framework for using LinkedIn is based on self-determination theory (SDT), which states that intrinsic and various types of extrinsic motivations drive people's behavior. In particular, professionals receiving the supports of *autonomy*, *competence*, and *relatedness* in their career development will have volitional and extrinsic motivations to use LinkedIn (Deci & Ryan, 1985; Gagne & Deci, 2005).

Furthermore, Nuttin and Lens (1985) proposed the theoretical connections between achievement motivation and "future time perspective" (FTP). In this vein, we apply the time perspective concept to understand professionals' use of LinkedIn. Bandura (1986) indicated that human actions are goal-directed through the self-regulatory system and are performed to obtain anticipated outcomes, whether at present or in the future. Both immediate and future goals are important in motivating individuals to engage in activities to achieve valued outcomes; nonetheless, how time perspective is related to the supports of the three psychological needs remains unclear to academics. In this study, we address the extent to which supports for autonomy, competence, and relatedness and the time perspective concept explain professionals' motivations to use LinkedIn, which in turn affects their ILPA.

Self-determination Theory

A central tenet of SDT is that human beings have three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985, 1991, 2000). Supports for these three needs are essential to individuals' motivation. There are two major types of motivation in performing a task, intrinsic motivation and extrinsic motivation, and are composed of various regulatory processes. Intrinsic motivation refers to the willingness to do a task because of a person's own interests, values, and the enjoyment and excitement it brings.

The internalization of self-determined types of extrinsic motivation, namely, integrated regulation and identified regulation, depends on the extent to which the supports of the three basic needs are met (Deci & Ryan, 1985). In this study, however, we exclude both the integrated and identified regulations, as previous studies had difficulty separating integrated regulation from identified regulation and intrinsic motivation (Gagne et al., 2010). Malhotra, Galletta, and Kirsch (2008) found that both identified regulation and intrinsic motivation are associated with feelings of volition and are often perceived as the "origin" of behavior. As such, the three motivations (intrinsic motivation, identified regulation, and integrated regulation) seem indistinguishable, and we thus consider only intrinsic motivation in this study.

The two least self-determined types of extrinsic motivation, external regulation and introjected regulation, require little to no internalization. Introjected regulation pressures people to behave to feel worthy, and ego involvement to buttress their fragile egos (Ryan, 1982). When a person

is externally regulated, he/she acts with the intention of obtaining a desired consequence or avoiding an undesired one, so he/she is spurred to action only when the action is instrumental to those ends. Our proposed framework is illustrated in Figure 1 below.

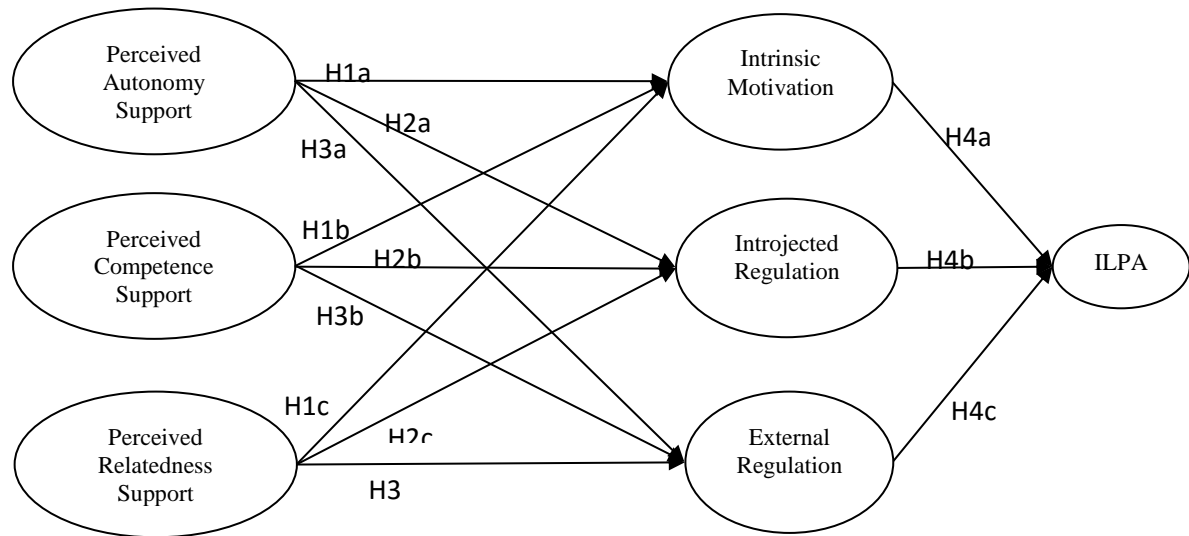


Figure 1: Theoretical framework

According to SDT, individuals experience intrinsic motivation and perform activities volitionally when their innate and fundamental needs for autonomy, competence, and relatedness are met (Deci & Ryan, 2000; Deci et al., 2001).

Perceived autonomy support refers to perceived support for control over career planning and development from their use of LinkedIn. When professionals are accepted into a discussion group or other communication channels in LinkedIn, they feel that they can trust and share with other professionals on the latest industry and market information. These open and self-initiated exchanges offer professionals new choices and options. Moreover, LinkedIn provides a platform for industry influencers (e.g., Meg Whitman or Bill Gates) to publish their views on and visions for their industry. This attracts followers to stay on LinkedIn (Kaufman, 2013). The continual inflow of information and knowledge gain from various publications, in addition to the exchanges within discussion groups, give professionals new choices and options for their career planning and development and helps them derive a sense of satisfaction from their LinkedIn use. As such, we claim that professionals receiving autonomy support are intrinsically motivated to use LinkedIn.

Perceived competence support refers to perceived support for sharpening and recognizing skills and competence from using LinkedIn. Professionals can deliberately design their profiles and upload their resumes to display their work and experience and can view each other's profiles. They can also endorse and add remarks to enrich each other's profiles. Moreover, LinkedIn has been viewed as a hub for professional information, as many published articles are available to its members. Through open and self-initiated exchanges with others in LinkedIn's discussion groups and other communication channels, professionals can enhance their existing skills and develop new ones for their own tasks. Hence, feelings of competence are fostered and LinkedIn use is intrinsically motivated out of professionals' own interests.

Perceived relatedness support refers to perceived support for building connections and receiving social support through LinkedIn use. When a person is engaged in a relatedness-support environment, acknowledgement, positive regards, caring, and interest in one's own experience are emphasized (Roca & Gagne, 2008). Similar to other social networking sites, a professional can publish a post and update his/her LinkedIn home page, which may receive numerous "likes" and positive feedback from others. This connection provides people with identity and helps them to feel valued and part of a community. In this regard, relatedness support is attained and a sense of closeness and belonging is nurtured. According to Ryan and Deci (2001), relatedness is a strong predictor of psychological well-being, and this feeling intrinsically motivates professionals to use LinkedIn out of enjoyment.

H1a: Perceived autonomy support has a positive influence on intrinsic motivation for using LinkedIn.

H1b: Perceived competence support has a positive influence on intrinsic motivation for using LinkedIn.

H1c: Perceived relatedness support has a positive influence on intrinsic motivation for using LinkedIn.

A professional's LinkedIn use may be enjoyable or uninteresting depending on the professional's own agenda. Meeting other professionals, gaining information, and learning knowledge can be fun and rewarding, while job seeking, posting resumes, and updating profiles can be tedious and uninteresting. When a person loses interest in an activity, he/she must be extrinsically motivated to continue (Ryan & Deci, 2000).

Some professionals feel obliged to use LinkedIn because they do not want to miss out on opportunities to enhance their autonomy in career planning and development. Others become involved in LinkedIn to show that they are competent and to receive recognition from and to learn from others. Still others worry about lagging behind and being considered inferior to others; hence, their LinkedIn use is introjected regulated.

LinkedIn encourages professionals to connect and build networks with others, but to build direct connections, invitations must be sent to others. Typically, invitations are not always being accepted unless the professionals know each other, whether as schoolmates, colleagues, or acquaintances. As such, we argue that professionals are not obliged to use LinkedIn to build networks with others.

H2a: Perceived autonomy support has a positive influence on introjected regulation for using LinkedIn.

H2b: Perceived competence support has a positive influence on introjected regulation for using LinkedIn.

H2c: Perceived relatedness support has no effect on introjected regulation for using LinkedIn.

People may become involved in an activity to gain something or because they are required to (Niemic & Ryan, 2009). The exchanges in discussion groups and influencers' views are helpful for providing choices, options, and the latest knowledge and skills for career development and advancement. As such, we propose that some professionals are externally regulated to use LinkedIn.

Similar to the argument in hypothesis 2c, professionals may feel that they are being penalized for not using LinkedIn because they may have already established connections with others outside LinkedIn. Therefore, using LinkedIn to share with other professionals and to gain social support for career development and advancement becomes secondary.

H3a: Perceived autonomy support has a positive influence on external regulation for using LinkedIn.

H3b: Perceived competence support has a positive influence on external regulation for using LinkedIn.

H3c: Perceived relatedness support has no effect on external regulation for using LinkedIn.

In LinkedIn, professionals can promote and market themselves through their profile page. In addition, the ongoing interactions and exchanges within the discussion groups enable professionals to establish connections with others and attract potential recruiters. These benefits apply to those who are intrinsically motivated to use LinkedIn, those who are introjected motivated to use LinkedIn to avoid missing out on opportunities, and those who are externally motivated to use LinkedIn to enhance their career development. Hence, we argue

that the more frequently the professionals use LinkedIn, the higher probability that they intend to leave their organizations for professional advancement.

H4a: Intrinsic motivation for using LinkedIn has a positive influence on ILPA.

H4b: Introjected regulation for using LinkedIn has a positive influence on ILPA.

H4c: External regulation for using LinkedIn has a positive influence on ILPA.

Time perspective and its relationship with self-determination theory

Zimbardo and Boyd (1999) defined time perspective as “the often nonconscious process whereby the continual flows of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence and meaning to those events.” Time perspective—individuals’ understanding of their psychological past, present, and future—is seen as fundamental to an understanding of human behavior.

Conceptually, present-oriented individuals react to instant stimuli and social settings; they think more about how their current actions can bring immediate pleasure and excitement; while future-oriented individuals make decisions and take actions based on the anticipated consequences of imagined future scenarios, and they think more about how their current actions influence their future (Wininger & DeSena, 2012). Individuals with a present–future orientation combine both types of characteristics: they care about immediate results and future consequences. Individual differences in time perspectives may serve as antecedents of motivational interference.

Past studies concentrated only on the connections between time perspective and motivational regulations and excluded the three basic psychological needs. This study explores the connections between the time perspective concept and the full SDT model in a more systemic course.

As mentioned, perceived autonomy support encourages initiatives and emphasizes choice and options, self-direction, and perspective. When new choices and options are anticipated through LinkedIn exchanges, a professional will naturally evaluate the available choices and options to optimize the end results. If choices and options are not available, a professional will likely stay put and maintain the status quo. Hence, we argue that the availability of choices and options by perceived autonomy support implicates future orientation.

In terms of perceived competence support, professionals take all kinds of opportunities to absorb new information and to learn new knowledge in the hope of better equipping themselves for any advancement opportunity. Learning new information and knowledge is a common and continual process. As such, we suggest that perceived competence support represents a continual time horizon, the present and the future.

For perceived relatedness support, Cox, Duncheon, and McDavid (2009) argued that feeling accepted by others is positively related to self-determined motivation and enjoyment. Professionals using LinkedIn tend to establish and expand their social network with other professionals for bonding and acceptance. Social support through social interactions, such as exchanging dialog and sharing posts and comments, generates feelings of acceptance, are instant rather than deferred. Therefore, we propose that perceived relatedness support is categorized as occurring in the present.

The three motivations have their unique time implications and are associated with different leading effects between the present and future. By using LinkedIn, a professional can benefit from gaining and learning new information and knowledge and from establishing a social network with other professionals; he/she must enjoy carrying out such tasks because of his/her own interests and desires at the moment. It is thus straight forward to categorize intrinsic motivation as occurring in the present.

De Bilde, Vansteenkiste, and Lens (2011) proposed that there is a positive association between introjected regulation and the present and future time perspectives. We argue that professionals who are introjectedly motivated to use LinkedIn are afraid to miss out on anything. To avoid any loss, they must continue their use in perpetuity. Therefore, we claim

that behavior in accordance with introjected regulation implicates a continual act that combines both present and future time orientations.

In general, professionals using LinkedIn intend to enhance their career development and advancement to achieve their ultimate goals, such as ILPA, in the future. Thus, external regulation is associated with future orientation.

After categorizing the three need supports and the three motivations based on their unique time perspectives, some alignments are identified. Autonomy support provides professionals with choices and options and helps direct their career development and advancement, inducing professionals to be more future-oriented. Hence, we hypothesize:

H5: Perceived autonomy support has a stronger influence on external regulation than intrinsic motivation and introjected regulation for LinkedIn use.

With competence support for professional knowledge and industrial trends, which benefits a professional's competitiveness regardless of the time orientation (present or future), a professional is obliged to use LinkedIn continually. Hence, we hypothesize:

H6: Perceived competence support has a stronger influence on introjected regulation than intrinsic motivation and external regulation for LinkedIn use.

Relatedness support generates enjoyment from using LinkedIn. When a professional is accepted and agreed with by other professionals, such as by being "liked" by peers when he/she posts an update or comment, the pleasant feeling is spontaneous and immediate and not related to an obligation or reward. As such, we hypothesize:

H7: Perceived relatedness support has a stronger influence on intrinsic motivation than introjected regulation and external regulation for using LinkedIn.

Pertaining to the time perspective concept, we claim that ILPA is related to the present and future time horizons because professionals using LinkedIn can find new jobs and receive new job offers at any time. Professionals using LinkedIn have mixed agendas along different time horizons: some professionals may have an immediate need for a new job, possibly because of dissatisfaction with their current job, layoff pressure, or being fired, while others may have no intention of changing jobs now and are using the LinkedIn platform to build up their network and credentials for the future. Other professionals do not have a set schedule for changing jobs and are keeping their options open should an offer for a better job be made. Hence, our last hypothesis:

H8: Intrinsic motivation, introjected regulation, and external regulation have similar effects on ILPA for LinkedIn use.

Research Methodology

Procedure and participants

Our target population is professionals who are registered active LinkedIn users, have used LinkedIn for at least six months and are members of at least one discussion group. According to LinkedIn's rules, a discussion group can have a maximum of 20,000 members. 30 discussion groups were selected and 5,810 professionals were randomly chosen. Because LinkedIn only allowed 100 inMails to be sent per day; the data collection took seven months, from January 1, 2015 to July 31, 2015. A total of 379 responses were collected by August 1, 2015 with a response rate of 6.5%. Table 1 shows some of the demographic information of the respondents, including their gender, age, education, income level, number of connections, weekly average LinkedIn use, and number of years as a LinkedIn member; and which matched the general population of LinkedIn.

Table 1: Descriptive statistics of the respondents

Gender: Male (25.1%), Female (74.9%)	Age: Below 25 (5.3%), 26–30 (10.6%), 31–40 (29.4%), 41–50 (32.5%), 51 or above (22.2%)
Education: Secondary school (1.3%), Diploma/Higher diploma (6.1%), Graduate (20.6%), Post-graduate (72%)	
Annual Income (US\$): Below \$20,000 (11.4%), \$20,001–\$40,000 (10.8%), \$40,001–\$60,000 (9.8%), \$60,001–\$80,000 (20.6%), \$80,001–\$100,000 (14.6%), \$100,001 or above (32.8%)	
No. of professional connections: 0–100 (13.2%), 101–200 (9.8%), 201–300 (6.1%), 301–400 (8.5%), 401 or above (62.4%)	
Weekly average time spent on LinkedIn: 0–2 hours (46.3%), 3–4 hours (25.7%), 5–6 hours (12.7%), 6–7 hours (3.2%), 8 hours or above (12.2%)	
LinkedIn membership duration: 1 year (11.9%), 2 years (10.6%), 3 years (6.3%), 4 years (7.4%), 5 years (19.6%), 6 years (10.6%), 7 years (33.6%)	

Measurements

Perceived autonomy, perceived competence, and perceived relatedness support

Twelve items measuring perceived autonomy support (PAS), perceived competence support (PCS) and perceived relatedness supports (PRS) were extracted from the Basic Need Satisfaction at Work Scale (W-BNS, Van den Broeck, et.al., 2010). PAS such as : “Other professionals on LinkedIn give me advice that helps me build a sense of control over my career,” “I can be open about my career aspirations with other professionals on LinkedIn.” PCS includes “I have become masterful in my profession from LinkedIn use,” “I feel competent when receiving endorsements and positive remarks from other professionals on LinkedIn.” PRS includes “I feel connected with other professionals when using LinkedIn,” “I feel a sense of belonging with other professionals when using LinkedIn.”

Intrinsic motivation, introjected regulation, and external regulation

Nine items were developed to measure intrinsic motivation (IM), introjected regulation (IR), and external regulation (ER) (Gagne et al, 2010). IM such as : “I use LinkedIn because I enjoy using this social network site very much,” “I use LinkedIn because I have fun using this social network site.” IR such as “I have to visit LinkedIn because using LinkedIn makes me feel active in developing my career,” “I use LinkedIn because I don’t want to feel stuck in my career.” ER such as : “I use LinkedIn because it helps me to build my career path,” “I use LinkedIn because it enables me to meet many people in my profession who can help my career development and advancement.”

Intention to leave an organization for professional advancement

Three items for ILPA were developed (Kalbers & Fogarty, 1995; Shafer et al., 2002) such as : “I sometimes explore my opportunities for career advancement at other companies,” “I am likely to leave this company for career advancement at another company within the next year.”

Control variables

First, three types of professional and organizational commitment are considered as controlled factors, as they may affect ILPA (Cho and Huang, 2012). Twelve items were extracted following Meyer and Allen (1991). Affective professional commitment (APC) such as : “I would be very happy to spend the rest of my career in my profession,” “I enjoy discussing my profession with people outside it.” Normative professional commitment (NPC) such as : “Jumping from profession to profession does not seem unethical to me,” “I do not believe that a person must always be loyal to his/her profession.” Continuance professional commitment (CPC) such as : “Too much of my life would be disrupted if I decided to leave my profession now” “It would be too costly for me to leave my profession now.”

The three organizational commitment: affective (AOC), normative (NOC), and continuance (COC) also affect ILPA. These items are similar to the three components used to measure professional commitment, but we change “profession” to “organization.”

The motivations of the use of a technology will drive the actual use of that technology (Roca & Gagne, 2008). Actual LinkedIn usage such as the number of connections, the weekly average,

and the number of years as a LinkedIn member (Table 1 above) were collected and considered as control variables that could affect ILPA.

Professionals' ILPA also depends on organizational support for development (OSD), where the development programs help equipping them with new knowledge and skills and be able to handle new job requirements for career advancement (Nadler and Nadler, 1989). Following Kraimer et al (2011), five OSD items such as "My organization has programs and policies that help employees to advance in their functional specialization."

Direct and indirect investments in a profession represent costs that are operationalized mainly by variables such as age, education, and tenure in the profession (Becker, 1960). Past research has found that individual behavior may vary across such personal factors as gender, education, age, and annual income (Venkatesh et al., 2003). We consider the tenure of a professional's LinkedIn use and his/her usage frequency because frequent users are likely to be more familiar with its features, which may affect their continued use.

In this study, gender is coded as 0 for "male" and 1 for "female." Age is coded from 1 for "18 to 25" to 5 for "51 or above." Education is coded from 1 for "secondary school" to 4 for "post-graduate." Annual income is coded from 1 for "no income" to 7 for "over HK\$60,000." Tenure is coded from 1 for "1 year" to 7 for "7 years." Number of connections is coded from 1 for "0–100" to 5 for "401 or above." Frequency is coded from 1 for "0–2 hours" to 5 for "8 hours or over." Other than the above biographic data, all of the constructs in this study were measured by a self-reported questionnaire using a 7-point scale ranging from "highly disagree" (1) to "highly agree" (7).

Analyses and Results

Data analysis

We computed the means, standard deviations, and bivariate correlations for all of the data. To ensure that the instrument of this study is reliable and valid, we demonstrated a confirmatory factor analysis of the essential constructs: the supports for the three basic innate needs, intrinsic motivation, introjected regulation, external regulation, and the intention to leave an organization for professional advancement due to LinkedIn use. To test the hypotheses, we used structural equation modeling to analyze the framework. We also checked whether the control variables have any significant effects on ILPA.

Instrument reliability and validity

Reliability is defined as the degree to which a construct is free from errors and provides consistent results. We used Cronbach's alpha to measure the internal consistency of the multi-item scales. In this study, the Cronbach's alphas of all of the constructs were over 0.7. This shows that the sets of items correlated well with each other; therefore, all of them are deemed reliable. In addition, because all of the items in these constructs were adapted from past studies, all of the constructs can be considered representative in terms of face validity.

Means, standard deviations, Cronbach's alpha, and correlation variables

Considering the standard deviations of all of the constructs, there are enough variations for the sampled data to represent the population of LinkedIn users. Moreover, all of the correlation values are below 0.7 suggests that every construct is necessary and independent of the others. The mean of perceived autonomy support (PAS) is 4.89, which is higher than the neutral point of 4, indicating that professionals receive a high degree of autonomy support from their use of LinkedIn. Perceived relatedness support (PRS) and perceived competence support (PCS) have means of 4.03 and 4.41, which are close to the neutral point of 4, indicating that professionals receive a fair amount of competence and relatedness support from LinkedIn use. Intrinsic motivation (IM), introjected regulation (IR), and external regulation (ER) have mean values of 4.88, 3.85, and 5.46, respectively, indicating that professionals were most strongly motivated by external regulation, then by intrinsic motivation, and least by introjected regulation. The mean value for the intention to leave an organization for professional advancement (ILPA) is 4.79, indicating that professionals using LinkedIn intended to leave their organizations in the near future.

Common method bias

To test for common method bias, we applied Harman's single factor test (Podsakoff et al., 1986). The results of the total variance obtained indicate that no single factor, with a dominant value of 14.2%, accounts for most of the covariance. To test the common method variance, we applied structural equation modeling (SEM) with and without the marker. Our analysis shows no obvious difference between the path coefficients with and without the marker. These findings confirmed that common method bias is not significant and therefore not a concern in the study.

According to the structural equation modeling as shown in Figure 2, we find that the control variables NPC, AOC, COC, OSD, Age, and Position have significant negative effects on ILPA ($\beta = -0.109^*$, -0.209^{***} , -0.206^{***} , -0.323^{***} , -0.093^* , -0.108^*). This is consistent with the notion that if a professional feels obligated to stay with his/her profession (NPC), his/her tendency to stay with his/her organization is rather high. To a certain extent, when a professional has a strong sense of belonging to his/her organization (AOC), is older (Age), has a relatively high position within the organization (Position), or must sacrifice too much to leave his/her organization (COC), his/her desire to leave is minimal. Furthermore, when a professional receives strong support from his/her organization (OSD), he/she is highly likely to remain and to stay loyal to the organization.

Hypotheses Testing

H1a, H1b, and H1c are supported. Consistent with SDT, it is confirmed that autonomy support, competence support, and relatedness support have positive influences on intrinsic motivation with their β s being 0.500^{***} , 0.124^{**} , and 0.274^{**} respectively. As expected, professionals receive supports for autonomy, competence, and relatedness through LinkedIn use.

H2a, H2b, and H2c are supported. Introjected regulation is positively influenced by perceived autonomy support ($\beta = .114^{**}$), and perceived competence support ($\beta = .616^{**}$), but unaffected by perceived relatedness support ($\beta = -.085$). A professional should not ignore the benefits gained from LinkedIn use: the information learned and knowledge gained provide

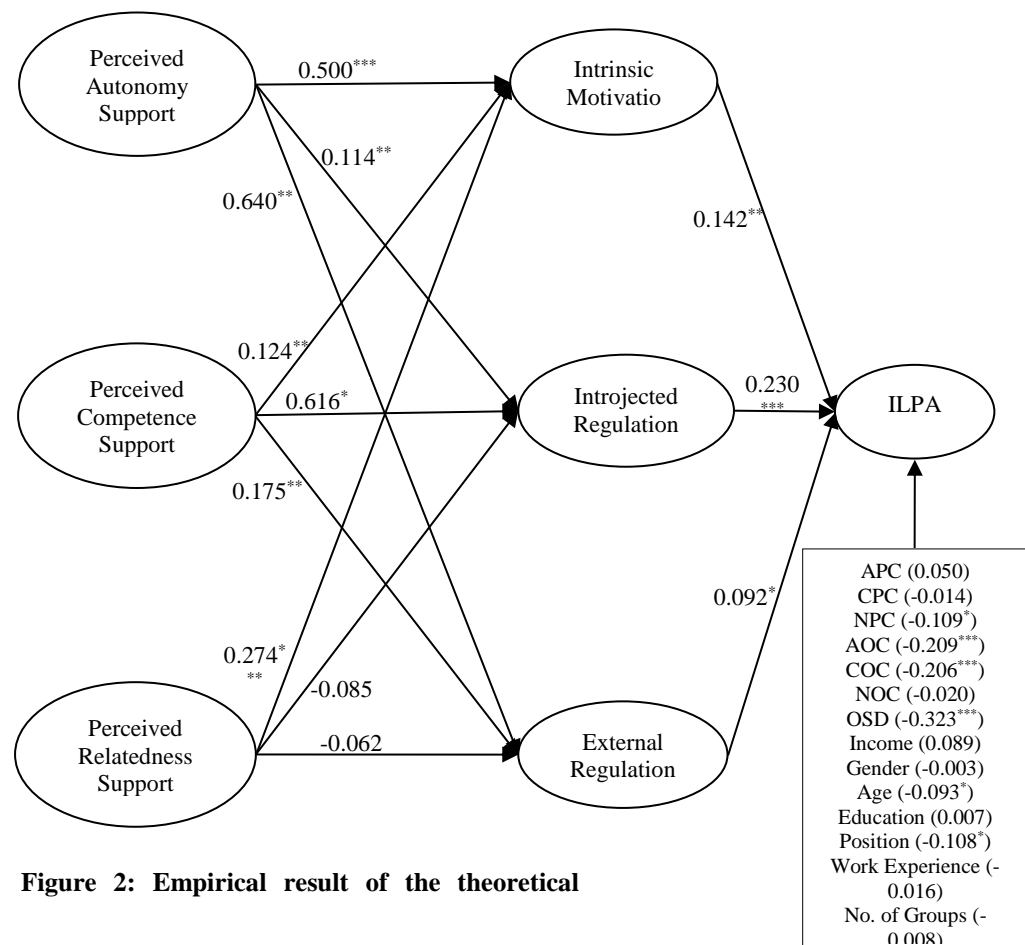


Figure 2: Empirical result of the theoretical

professionals with new choices and options for their career planning and development and help them develop new skill sets to sustain their competence.

H3a, H3b, and H3c are supported. External regulation is positively influenced by perceived autonomy support ($\beta = .640^{***}$), and perceived competence support ($\beta = .175^{**}$) but has no relationship with perceived relatedness support ($\beta = -.062$). Similar to H2a, H2b, and H2c, information learned and knowledge gained are beneficial for professionals for their career planning and development as well as enhancing their competence.

H4a, H4b, and H4c are supported. ILPA from using LinkedIn is positively influenced by intrinsic motivation ($\beta = .142^{**}$) and introjected ($\beta = 0.230^{***}$) and external regulations ($\beta = 0.092^{*}$). LinkedIn offers searching for career opportunities for professionals and a recruitment function for headhunters to identify potential candidates, which lead to a high likelihood of leaving their organization for professional advancement.

According to Cohen and Cohen (1983), the equation to compare the relative strengths of the associations between constructs is used to test H5, H6, H7, and H8:

$$t = (r_{xz} - r_{yz}) \cdot \text{sqr}((n - 3)(1 + r_{xy})) / \text{sqr}(2 \cdot (1 - r_{xz}^2 - r_{yz}^2 - r_{xy}^2 + 2 r_{xz} \cdot r_{yz} \cdot r_{xy}))$$

H5 is supported. In the equation, x =external regulation, y =introjected regulation, z =perceived autonomy support, n =sample size (379), $r_{xy} = 0.42$, $r_{yz} = 0.30$, $r_{xz} = 0.61$, t value is equal to 2.61, and the corresponding p value is < 0.05 (one-tailed test). Then, we substitute x =external regulation, y =intrinsic motivation, z =perceived autonomy support, $n = 379$, $r_{xy} = 0.49$, $r_{yz} = 0.60$, $r_{xz} = 0.61$, and the t value is 2.96 ($p < 0.05$, one-tailed test). Both analyses show that PAS has a stronger effect on external regulation than intrinsic motivation and introjected regulation.

H6 is supported. When we apply x =introjected regulation, y =external regulation, z =perceived competence support, $n = 379$, $r_{xz} = 0.56$, $r_{yz} = 0.40$, $r_{xy} = 0.43$, the t value is 3.59, with $p < 0.05$. When we apply x =introjected regulation, y =intrinsic motivation, z =perceived competence support, $n = 379$, $r_{xz} = 0.56$, $r_{yz} = 0.41$, $r_{xy} = 0.32$, t value is 3.26, with $p < 0.05$. Both findings confirm that perceived competence support has a stronger effect on introjected regulation than on external regulation and intrinsic motivation.

H7 is supported. To compare the effect of PRS on IM and IR, we substitute x =intrinsic motivation, y =introjected regulation, z =perceived relatedness support, $n = 379$, $r_{xy} = 0.32$, $r_{yz} = 0.22$, $r_{xz} = 0.53$; the t value is 1.97 ($p < 0.05$, one-tailed test). Next, PRS on IM and ER, we substitute x =intrinsic motivation, y =external regulation, z =perceived relatedness support, n = sample size (379), $r_{xy} = 0.49$, $r_{yz} = 0.35$, $r_{xz} = 0.53$; the t value is 3.19 ($p < 0.05$, one-tailed test). Both findings demonstrate that PRS has a stronger effect on intrinsic motivation than the other two, which is consistent with the time perspective concept.

H8 is supported. By substituting x =introjected regulation, y =external regulation, z =ILPA, $n = 379$, $r_{xz} = 0.23$, $r_{yz} = 0.20$, $r_{xy} = 0.43$, t value is 0.56, with $p < 0.05$. This means that introjected regulation does not have a stronger effect on IPLA than external regulation. We substitute x =introjected regulation, y =intrinsic motivation, z =IPLA, $n = 379$, $r_{xz} = 0.23$, $r_{yz} = 0.19$, $r_{xy} = 0.32$; t value is 0.69, with $p < 0.05$. Introjected regulation does not have a stronger effect on ILPA than intrinsic motivation. Finally, we substitute x =intrinsic motivation, y =external regulation, z =ILPA, $n = 379$, $r_{xz} = 0.19$, $r_{yz} = 0.20$, and $r_{xy} = 0.49$; t value is -0.197, states intrinsic motivation does not have a stronger effect on ILPA than external regulation.

Discussions

Most studies related to online social networking used SDT to predict online game addiction or e-learning tool adoption (Neys et al., 2014, Roca & Gagne, 2008); few used SDT to study professionalism. Past studies on time perspective focused on the motivation aspects with the time perspectives concept and did not consider the three psychological supports (Nuttin & Lens, 1985; Mouratidis & Lens, 2015). This study is one of the first to leverage both self-determination theory (SDT) and the time perspective concept to examine how the supports for autonomy, competence, and relatedness affect professionals' motivations for LinkedIn use, which in turn affect their ILPA on a more comprehensive spectrum.

Several theoretical implications are demonstrated. First, through SDT, the supports of perceived autonomy, competence, and relatedness are fulfilled and professionals are

intrinsically and extrinsically motivated to continue their LinkedIn use to achieve ILPA. This is consistent with many previous studies on motivation through the self-determination approach. For instance, Ntoumanis (2001) suggested that individuals are intrinsically and extrinsically motivated to exercise through the supports of all three basic psychological needs for enjoyment and good health. Halvari et al. (2013) demonstrated that dental home care and treatment behavior are sustained through intrinsic and extrinsic motivations. The LinkedIn website enables and supports professionals to search for jobs, gain new insights and information, and build networks, whether their use is intrinsically or extrinsically motivated.

Second, this is one of the first studies to apply the time perspective concept with the full SDT model to explain professionals' behavior and motivation on a social network site for ILPA, and we find matching between the supports of all three needs and the three motivations. Our findings confirm that perceived autonomy support matches well with external regulation as future orientation because professionals believe that they can control their planning for better career development and advancement through LinkedIn use. Perceived relatedness support and intrinsic motivation as present orientation are well aligned, many professionals enjoy LinkedIn use because of the networks they establish with other professionals help them gain social supports and a sense of belonging. Perceived competence support and introjected regulation are well matched, which demonstrates professionals feel obliged to use LinkedIn for competence enhancement on a continual time horizon. Finally, it confirms that intrinsic motivation, introjected regulation, and external regulation have similar effects on ILPA, professionals use LinkedIn have mixed agendas according to their own timelines for ILPA. To conclude, this study successfully uses the time perspective concept along the full SDT model to demonstrate that professionals' motivations for LinkedIn use are validated and well supported.

With respect to commercial practices, it is important for organizations to understand how a professional social media site could influence a professional's behavior and intention on changing jobs, as professionals believe their continual use of LinkedIn can eventually help them achieve ILPA. HR managers can use the LinkedIn platform to identify and recruit new employees when hundreds of thousands of potential candidates' profiles are easily accessible. Finally, it is important for LinkedIn to continue provide good support to its users and to attract new users; as such, website enhancement and improvement through innovation and creativity are crucial in sustaining LinkedIn's popularity.

Limitations

This study has several limitations that need to be considered. Since this research used a relatively small sample consider there are hundreds of millions of LinkedIn members, a large-scale study should be considered. Second, there are many other professional network sites outside the USA which should be considered. Third, the research method may not fully capture the dynamics of professionals' career development and network building as it changes over time. To address the above issues, future research should consider using multi-methods and longitudinal research designs. A longitudinal study combining qualitative and quantitative data would enable a process-oriented perspective that cannot be achieved by the use of a variance-based approach such as the one used here.

Conclusions

The results of this study suggest that professionals who use LinkedIn intend to leave their organizations for professional advancement, whether immediately or in the future. Many companies and recruiters use LinkedIn to identify potential employees (Bohnert & Ross, 2010; Sacks & Graves, 2012), and the site plays an important role for professionals, as this demonstrates their desire for ILPA. Our findings confirm that professionals obtain supports for the three basic needs through LinkedIn use and are motivated both intrinsically and extrinsically to continue their use to achieve ILPA. It is clear that a professional seeking professional advancement—whether to remain in the same organization or to move to a different organization—believes that using LinkedIn will help him/her to achieve this goal. With the increasing popularity of online social media that promote professional networking, HR managers must consider new and different measures to retain valuable employees, as turnover is time consuming and costly.

References

- Avci, S. (2013). Relations between self-regulation, future time perspective and the delay of gratifications in university students. *Education*, 133(4), 525-537.
- Bandura, A., (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ; Practice Hall.
- Becker, H.S. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 66(1), 32 – 42.
- Cho, V. and Huang, X. (2012). Professional commitment, organizational commitment, and the intention to leave for professional advancement: An empirical study on IT professionals. *Information Technology & People*, 25(1), 31-54.
- Cohen, J., and Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cox, A., Duncheon, N., and McDavid, L. (2009). Peers and teachers as sources of relatedness perceptions, motivation, and affective responses in physical education. *Research Quarterly for Exercise and Sport*, 80(4), 765-773
- De Bilde, J., Vansteenkiste, M., and Lens, W., (2011). Understanding the association between future time perspective and self-regulated learning through the lens of self-determination theory. *Learning and Instruction*, 21(3), 332-344.
- Deci, E.L., and Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., and Ryan, R.M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation*: Vol. 38. Perspectives on motivation (pp. 237-288). Lincoln: University of Nebraska Press.
- Deci, E.L., Ryan, R.M., Gagne, M., Leone, D.R., Usunov, J., and Kornazheva, B.P. (2001). Need satisfaction, motivation, and well-being in work organizations of a former eastern bloc country: a cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, 27(8), 930 – 942.
- Deci, E.L., and Ryan, R.M. (2000). The ‘what’ and ‘why’ of goal pursuits: human needs and the self-determination of behaviour. *Psychological Inquiry*, 11(4), 227 – 268.
- Gagne, M., and Deci, E.L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331 – 362.
- Gagne, M., Forest, J., Gilbert, M.H., Aube, C., Morin, E., and Malorni, A., (2010). The motivation at work scale: validation evidence in two languages. *Educational and Psychological Measurement*, 70(4), 628 – 646.
- Halvari, A.E.M., Halvari, H., Bjornebekk, G., and Deci, E.L. (2013). Oral health and dental well-being: testing a self-determination theory model. *Journal of Applied Social Psychology*, 43(2), 275 – 292.
- Hitt, M.A., Beamish, P.W., Jackson, S.E., and Mathieu, J.E., (2007). Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, 50(6), 1385–1399.
- Kalbers, L.P., and Fogarty T.J. (1995). Professionalism and its consequences: a study of internal auditors. *Auditing: A Journal of Practice and Theory*, 14(1), 64 – 86.
- Kaufman, L. (2013, June 18). LinkedIn gains notice with insight posts. *International Herald Tribune*.
- Kraimer, M.L., Siebert, S.E., Wayne, S.J., Linden, R.C., Bravo, J. (2011). *Journal of Applied Psychology*, 96(3), 485-500
- Malhotra, Y., Galletta, D.F., and Kirsch, L.J. (2008). How endogenous motivations influence users’ intentions: beyond the dichotomy of extrinsic and intrinsic user motivations. *Journal of Management Information Systems*, 25(1), 267-300.
- Meyer, J.P., and Allen, N.J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61 – 89.

- Mouratidis, A., and Lens, W. (2015). Adolescents' psychological functioning at school and in sports: the role of future time perspective and domain-specific and situation-specific self-determined motivation. *Journal of Social and Clinical Psychology*, 34(8), 643-673.
- Nadler, L. and Nadler, Z. (1989). *Developing Human Resources*, 3rd edition. San Francisco: Jossey-Bass.
- Neys, J.L.D., Jansz, J., Tan, E.S.H. (2014). Exploring persistence in gaming: the role of self-determination and social identity. *Computers in Human Behavior*, 37, 196-209.
- Niemiec, C.P., and Ryan, R.M. (2009). Autonomy, competence, and relatedness in the classroom. Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144.
- Ntoumanis, N. (2001). A self-determination approach to the understanding of motivation in physical education. *British Journal of Educational Psychology*, 71(2), 225-242.
- Nuttin, J., and Lens, W. (1985). *Future time perspective and motivation: Theory and research method*. Hillsdale, NJ: Erlbaum.
- Podsakoff, P.M., and Organ, D.W. (1986). Self-reports in organizational research: problems and prospects. *Journal of Management*, 12(4), 531-544.
- Roca, J.C. and Gagne, M. (2008). Understanding e-learning continuance intention in the workplace: a self-determination theory perspective. *Computers in Human Behaviour*, 24(4), 1585 – 1604.
- Rong, G., and Grover, V., (2009). Keeping up-to-date with information technology: testing a model of technology knowledge renewal effectiveness for IT professionals. *Information & Management*, 46(7), 376 – 387.
- Ryan, R.M., (1982). Control and information in the interpersonal sphere: an extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43(3), 450-461.
- Ryan, R.M., and Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Shafer, W.E., Park, L.J., and Liao, W.M. (2002). Professionalism, organizational-professional conflict and work outcomes: a study of certified management accountants. *Accounting, Auditing and Accountability Journal*, 15(1), 44-68.
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., and Lens, W. (2010) Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale, *Journal of Occupational and Organizational Psychology*, 83, 981-1002.
- Venkatesh, V., Morris, M.G., Davis, G.B., and Davis, F.D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- Williams, L.J., Hartman, N., and Cavazotte, F. (2010). Method variance and marker variables: a review and comprehensive CFA marker technique. *Organizational Research Methods*, 13(3), 477-514.
- Wininger, S.R. and DeSena, T.M. (2012). Comparison of future time perspective and self-determination theory for explaining exercise behavior. *Journal of Applied Biobehavioral Research*, 17(2), 109-128.
- Zimbardo, P.G., and Boyd, J.N. (1999). Putting time in perspective: A valid, reliable individual-difference metric. *Journal of Personality and Social Psychology*, 77(6), 1271-1288.